

IN THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Currently Amended) A sheet reversing controller comprising:
a first conveying path to convey plural sheets in a first direction with a specified gap;
a reversing portion arranged at the downstream in ~~the~~ a conveying direction of the first conveying path, comprising a reversing roller capable of normal and reverse rotations to take and reverse the sheets fed from the first conveying path and a pinch roller arranged opposing to the reversing roller;
a second conveying path to take and convey the sheets fed in a second direction differing from the first direction of the first conveying path by the reversing portion; and
a controller to ~~control~~ control the conveyance of the sheets so that the conveying gap between the sheets conveyed on the second conveying path becomes equal to the specified ~~conveying~~ gap when conveyed on the first conveying path regardless of lengths of the plural sheets, wherein the controller sets a protruding amount of the sheets protruding between the reversing portion and the second conveying path when the sheets are stopped for reversing the conveying direction of the sheets to a fixed length regardless of the lengths of the sheets.
2. (Canceled).
3. (Currently Amended) The sheet reversing controller according to claim 1, wherein the controller controls a tangential velocity of the reversing roller when rotating in the normal direction so as to agree with a conveying velocity of the sheets before the sheets fed from the first conveying path ~~reaches~~ reach the reversing roller in the reversing portion.
4. (Original) The sheet reversing controller according to claim 1, wherein the controller controls a tangential velocity of the reversing roller when rotating in a reverse direction to feed the sheets in the second direction differing from the conveying direction of

the first conveying path so as to agree with the conveying velocity of the second conveying path to take and convey the sheets.

5. (Currently Amended) A sheet reversing control method comprising:
conveying plural sheets on a first conveying path in a first direction with a specified gap;
taking and reversing the sheets fed from the first conveying path in a reversing portion arranged at the downstream in a conveying direction of the first conveying path comprising a reversing roller that is capable of ~~normal/reverse rotation~~ normal and reverse rotations and a pinch roller arranged opposing to the reversing roller;
taking the sheets in a second direction differing from the first direction after reversing by the reversing portion and conveying on the second conveying path; and
controlling a conveyance of the sheets so that ~~the~~ a conveying gap of the sheets conveyed on the second conveying path becomes equal to the specified gap when conveyed on the first conveying path regardless of the lengths of the plural sheets, wherein the control step controls an amount of the sheet protruding between the reversing portion and the second conveying path when stopping the sheets for reversing its conveying direction to a fixed length.

6. (Canceled).

7. (Currently Amended) The sheet reversing control method according to claim 5, wherein the control ~~steps~~ step controls a tangential velocity of the reversing roller in the normal rotation to agree with a conveying velocity of the sheets before the sheets fed from the first conveying path ~~reaches~~ reach the reversing roller of the reversing portion.

8. (Currently Amended) The sheet reversing control method according to claim 5, wherein the control ~~steps~~ step controls a tangential velocity of the reversing roller when rotating in a reverse direction to feed the sheets in the second direction ~~that is differing from the conveying direction of the first conveying path from the reversing portion~~ so as to agree with a the conveying velocity of the second conveying path for taking and conveying the fed sheet become in accord with each other to take and convey sheets.

9. (New) The sheet reversing controller according to claim 1, wherein control of the conveyance of the sheets so that the conveying gap between the sheets conveyed on the second conveying path becomes equal to the specified gap when conveyed on the first conveying path regardless of lengths of the plural sheets is done with a single inverter.

10. (New) The sheet reversing control method according to claim 5, wherein said controlling includes controlling a conveyance of the sheets so that a conveying gap of the sheets conveyed on the second conveying path becomes equal to the specified gap when conveyed on the first conveying path regardless of the lengths of the plural sheets with a single inverter.